FINAL EXAM - PRACTICE TEST | NEW BRUNSWICK PRE-CALCULUS A 120 · FINAL EXAM · 50 QUESTIONS

Final Exam — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **The graph of y = 5f(x) is the graph of f**

- A shifted left
- B reflected in the x axis
- C stretched vertically by a factor of 5
- D shifted up

Understand It with Pulse | Flag a mistake

2 **For f(x) = 4x + 8 , the inverse function evaluated at 20 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **For f(x) = 5 × 2^x , the value of f(3) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **In radians, 60 degrees is**

- A π/3
- B π/6
- C π/4
- D π/2

Understand It with Pulse | Flag a mistake

5 **The smallest nonnegative angle in degrees whose sine is 0.707 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **For f(x) = (x - 4)² plus 1 , the vertex has y coordinate**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A function and its inverse undo each other. If f(x) = 4x , then f inverse of f(3) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **The function f(x) = 2^x takes the value 32 when x is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **The reference angle for 210 degrees is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **The value of $\sin^2 + \cos^2$ for an angle of 0 degrees is**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **The graph of $y = x^2$ is translated 3 units horizontally and -2 units vertically . The vertex of the translated graph has x coordinate**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **The inverse of $f(x) = 4x + 5$ has slope**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **The value of log base 3 of 81 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **The reference angle for an angle of 210 degrees is**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **The tangent of 45 degrees is**

ANSWER

Understand It with Pulse | Flag a mistake

16 **If f(x) = x + 2 and g(x) = 3x , then g(f(1)) is**

ANSWER

Understand It with Pulse | Flag a mistake

17 **A function is one to one if it**

A passes the horizontal line test

B is a straight line

C has a graph that is a circle

D is always increasing

Understand It with Pulse | Flag a mistake

18 **If log base 3 of x equals 4, then x equals**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **The sine of 90 degrees is**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **tan of 60 degrees to three decimal places is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **For g(x) equals 4 times f(x) plus 2, where f(2) equals 4, the value of g(2) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **The square root of 36 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **The value of 3^4 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **For an angle of 45 degrees in standard position, sin of the angle to three decimal places is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **The equation sin x = 1 has this many solutions between 0 and 360 degrees inclusive**

ANSWER _____

Understand It with Pulse | Flag a mistake

26 **Multiplying a function by 3 stretches its graph vertically by a factor of**

ANSWER _____

Understand It with Pulse | Flag a mistake

27 **The number whose cube is 27 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

28 **The value of $10^{-}2$ as a decimal is**

ANSWER _____

Understand It with Pulse | Flag a mistake

29 **Ninety degrees, expressed in radians, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

30 **The equation sin x = 0 has a solution at x = 360 degrees in the range 0 to 360 degrees**

A no

B only for acute angles

C yes

D never

Understand It with Pulse | Flag a mistake

31 **For f(x) = (x - 2)² plus -3 , the vertex has y coordinate**

ANSWER _____

Understand It with Pulse | Flag a mistake

32 **The cube root of 64 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

33 **500 dollars grows at 10 percent per year compounded yearly. Its value after 3 years in dollars to two decimal places is**

ANSWER _____

Understand It with Pulse | Flag a mistake

34 **In radians, 45 degrees is**

A π/6

B π/4

C π/3

D π/2

Understand It with Pulse | Flag a mistake

35 **The equation sin x = 0 has a solution at x = 90 degrees in the range 0 to 360 degrees**

- A yes
- B no
- C only for acute angles
- D never

Understand It with Pulse | Flag a mistake

36 **The graph of y = 8f(x) is the graph of f**

- A shifted left
- B stretched vertically by a factor of 8
- C reflected in the x axis
- D shifted up

Understand It with Pulse | Flag a mistake

37 **The solution of the equation square root of x = 3 is x equals**

ANSWER

Understand It with Pulse | Flag a mistake

38 **The solution of the equation $2^x = 4$ is x equals**

ANSWER

Understand It with Pulse | Flag a mistake

39 **For an angle of 270 degrees in standard position, cos of the angle to three decimal places is**

ANSWER

Understand It with Pulse | Flag a mistake

40 **The value of $1 + \tan^2(30°)$, which = $\sec^2(30°)$, to two decimal places is**

ANSWER

Understand It with Pulse | Flag a mistake

41 **The graph of y = f(x minus 3) is the graph of f shifted this many units to the right**

ANSWER

Understand It with Pulse | Flag a mistake

42 **The solution of the equation square root of x = 7 is x equals**

ANSWER

Understand It with Pulse | Flag a mistake

43 **The solution of the equation $2^x = 64$ is x equals**

ANSWER

Understand It with Pulse | Flag a mistake

44 **An angle coterminal with 60 degrees found by adding 360 degrees is**

ANSWER

Understand It with Pulse | Flag a mistake

45 **The value of 1 + tan²(135°), which = sec²(135°), to two decimal places is**

ANSWER _____

Understand It with Pulse | Flag a mistake

46 **The graph of y = f(x minus 7) is the graph of f shifted this many units to the right**

ANSWER _____

Understand It with Pulse | Flag a mistake

47 **For f(x) = the square root of (x - 4) , the smallest value in the domain is**

ANSWER _____

Understand It with Pulse | Flag a mistake

48 **The solution of the equation log base 10 of x = 3 is x equals**

ANSWER _____

Understand It with Pulse | Flag a mistake

49 **An angle coterminal with 180 degrees found by adding 360 degrees is**

ANSWER

Understand It with Pulse | Flag a mistake

50 **The value of cos of -45 degrees to three decimal places is**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	C	**18.**	81	**35.**	B
2.	3	**19.**	1	**36.**	B
3.	40	**20.**	1.732	**37.**	9
4.	A	**21.**	18	**38.**	2
5.	45	**22.**	6	**39.**	0
6.	1	**23.**	81	**40.**	1.33
7.	3	**24.**	0.707	**41.**	3
8.	5	**25.**	1	**42.**	49
9.	30	**26.**	3	**43.**	6
10.	1	**27.**	3	**44.**	300
11.	3	**28.**	0.01	**45.**	2.00
12.	0.25	**29.**	1.57	**46.**	7
13.	4	**30.**	C	**47.**	4
14.	30	**31.**	-3	**48.**	1000
15.	1	**32.**	4	**49.**	540
16.	9	**33.**	665.50	**50.**	0.707
17.	A	**34.**	B		

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